What is claimed is:

1. A dual wall cup assembly having an open end, comprising:

(a) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open;

(b) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall;

(c) the inner cup is configured to be receivable within outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; the gap between cups are essentially closed and consists of a negative pressure; and

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup.

2. The dual wall cup assembly of claim 1 further comprising:

(e) a plurality of venting grooves, the venting grooves are on outside surface of the inner cup in the area where the top end of the outer cup mates with the outside surface of the inner cup, the venting grooves are of a sufficient number and a sufficient size of each individual venting groove such that the air between the inner and outer cup is sufficiently displaced in the time required to bring the inner and outer cup together.

3. The dual wall cup assembly of claim 2 wherein the cup assembly is in the form of a child spill-proof cup, the cup has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and

includes a generally arcuate front and rear walls that converge to an outwardly protruding tip of the spout.

4. A method of producing a dual wall cup assembly comprising the following steps:

(a) forming both an inner cup and an outer cup in one mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) forming an overmold ring that is applied to the cup assembly and located at an outer portion of the cup assembly in an area where a top end of the outer cup mates with the inner cup to seal the gap and to form a shrinkage fit with the cup assembly; and

(e) opening the mold and ejecting the cup assembly from the mold.

5. The method of claim 4, comprising the additional step:

applying a negative pressure to the gap between the inner and outer cup while the cup assembly is in the mold and prior to applying the overmold ring to the cup assembly, the negative pressure is of a sufficient size to pull air, which is between the inner and outer cup, that is to be sufficiently displaced in the time required to bring the inner and outer cup together.

6. The method of claim 5, wherein the mold is closed at step (c) before the material is fully set.

7. A dual wall cup assembly having an open end, comprising:

(a) an outer cup has a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open;

(b) an inner cup has a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall;

(c) inner cup is configured to be receivable within outer cup to create a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; the gap between cups are essentially closed; and

(d) the inner and outer cup are sufficiently mated such as to have high impact resistance both at room temperature and at refrigerated temperature; high insulation properties; and superior dishwasher resistance.

8. A method of producing a dual wall cup assembly comprising the following steps:

(a) forming an inner cup and an outer cup in a mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) opening the mold and ejecting the cup assembly from the mold; and

(e) forming an overmold ring that is applied to the cup assembly and located at an outer portion of the outer cup in an area where a top end of the outer cup mates with the

~~inner cup to seal the gap and to form a shrinkage fit with the cup assembly.~~

Sub a7

9. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about 100 minutes to reach 70°F compared to a comparable single wall cup when tested by the cup insulation test method.

10. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup

is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup when tested by the cup insulation test method.

11. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar

includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout; and

(c) the dual wall assembly provides sufficient impact strength so that the cup assembly does not crack or break when tested by the drop test method.

Sub a2 12. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout;

(c) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup when tested by the cup insulation test method; and

(d) the dual wall assembly provides sufficient impact strength so that the cup assembly does not crack or break when tested by the drop test method.

13. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.05 to about 0.06 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the gap is about 0.06 to about 0.08 inches; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

14. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.03 to about 0.08 inches; and (iv) the inner

cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the gap is about 0.04 to about 0.1 inches; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

15. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the

thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

16. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup wherein the notch has a minor radius of about 0.02 to about 0.06 inches and a major radius of about 0.1 to about 0.3 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

17. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom

wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.03 to about 0.08 inches (iv) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (v) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the gap is about 0.04 to about 0.1 inches; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

18. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper

end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout, and a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

19. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup when tested by the cup insulation test method; and

(c) the dual wall assembly provides sufficient impact strength so that the cup assembly does not crack or break when tested by the drop test method.

20. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall,

larger top and smaller end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; and

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly protruding tip of the spout.

Sub a3 21. A cup assembly having an open end, comprising a dual wall comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup wherein the notch has a minor radius of about 0.02 to about 0.06 inches and a major radius of about 0.1 to about 0.3 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls.

~~22. A cup assembly having an open end, comprising a dual wall comprising: (i) an~~

outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.03 to about 0.08 inches (iv) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup; and (v) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the gap is about 0.04 to about 0.1 inches.

23. A cup assembly having an open end, comprising:

(a) a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls;

(b) the cup assembly is a child spill-proof cup that has an externally threaded upper end for removably mounting cap thereon, the cap has a depending collar, the collar has an internal thread adapted to threadedly engage the threaded upper end of the cup, the collar includes an inner flange that extends around the cap concentrically with and inside of the thread, the cap has a spout that projects from one side thereof upwardly, the spout is formed integrally with the cap and includes a front and rear walls that converge to an outwardly

protruding tip of the spout, and a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout; and

(c) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

24. A method of producing a dual wall cup comprising the following steps:

(a) forming both an inner cup and an outer cup in at least one mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) forming an overmold ring that is applied to the cup assembly and located at an outer portion of the cup assembly in an area where a top end of the outer cup mates with the inner cup to seal the gap and to form a shrinkage fit with the cup assembly; and

(e) opening the mold and ejecting the cup assembly from the mold to form a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; and (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls.

25. A method of producing a dual wall cup comprising the following steps:

(a) forming an inner cup and an outer cup in a mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) opening the mold and ejecting the cup assembly from the mold; and

(e) forming a ring by sonic welding or spun welding that is applied to the cup assembly and located at an outer portion of the outer cup in an area where a top end of the outer cup mates with the inner cup to seal the gap that results in a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the side wall thickness of the inner and outer cups are about 0.05 to about 0.06 inches; and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls wherein the gap is about 0.06 to about 0.08 inches.

26. A method of producing a dual wall cup comprising the following steps:

(a) forming an inner cup and an outer cup in a mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner

cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) opening the mold and ejecting the cup assembly from the mold; and

(e) forming a ring by sonic welding or spun welding that is applied to the cup assembly and located at an outer portion of the outer cup in an area where a top end of the outer cup mates with the inner cup to seal the gap that results in a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) a curve region at a bottom outside edge of the outer cup having a thickness greater than the wall thickness of the outer cup and a notch in a curve region at a bottom inside edge of the outer cup, and (iv) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls.

27. A method of producing a dual wall cup comprising the following steps:

(a) forming an inner cup and an outer cup in a mold by an injection molding process;

(b) opening the mold and aligning a mold piece corresponding with the inner cup with a mold piece corresponding with the outer cup;

(c) sufficiently closing the mold so that the cups mate and form a gap between side walls of an inner surface of the outer cup and an outer surface of the inner cup and

between bottom walls of the inner and outer cups, the gap between cups are essentially closed;

(d) opening the mold and ejecting the cup assembly from the mold; and

(e) forming a ring by sonic welding or spun welding that is applied to the cup assembly and located at an outer portion of the outer cup in an area where a top end of the outer cup mates with the inner cup to seal the gap that results in a dual wall cup assembly comprising: (i) an outer cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall and the top is open; (ii) an inner cup having a truncated conical-like shape with side wall, larger top and smaller end, the end is closed and sealed by bottom wall; (iii) the inner cup is configured to be receivable within the outer cup to create a gap between side wall of an inner surface of the outer cup and an outer surface of the inner cup and between the bottom walls; (iv) the dual wall assembly provides sufficient insulation ability so that the cup assembly takes at least about twice the time to reach 70°F compared to a comparable single wall cup when tested by the cup insulation test method, and provides sufficient impact strength so that the cup assembly does not crack or break when tested by the drop test method

28. The cup assembly of claim 3 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

29. The cup assembly of claim 9 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

30. The cup assembly of claim 10 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

31. The cup assembly of claim 11 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

32. The cup assembly of claim 12 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

33. The cup assembly of claim 13 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

34. The cup assembly of claim 14 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

35. The cup assembly of claim 15 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

36. The cup assembly of claim 16 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

37. The cup assembly of claim 17 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

38. The cup assembly of claim 20 having a valve located adjacent to or incorporated into the spout wherein the valve substantially prevents a liquid from leaking out of the spout.

39. The cup assembly of claim 28 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

40. The cup assembly of claim 29 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

41. The cup assembly of claim 30 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

~~42. The cup assembly of claim 31 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.~~

43. The cup assembly of claim 32 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

44. The cup assembly of claim 33 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

45. The cup assembly of claim 34 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

46. The cup assembly of claim 35 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

47. The cup assembly of claim 36 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

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48. The cup assembly of claim 37 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

49. The cup assembly of claim 38 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

50. The cup assembly of claim 20 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

51. The cup assembly of claim 23 wherein the inner cup is sufficiently sized to hold about 6 to about 9 ounces of liquid.

52. The cup assembly of claim 39 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

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53. The cup assembly of claim 40 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

54. The cup assembly of claim 41 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

55. The cup assembly of claim 42 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

56. The cup assembly of claim 43 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

57. The cup assembly of claim 44 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

58. The cup assembly of claim 45 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

59. The cup assembly of claim 46 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

60. The cup assembly of claim 47 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

61. The cup assembly of claim 48 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

62. The cup assembly of claim 49 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

63. The cup assembly of claim 19 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

64. The cup assembly of claim 20 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

65. The cup assembly of claim 23 wherein the cup assembly is formed from a plastic selected from the group consisting of polypropylene, polyethylene and polyester.

66. The cup assembly of claim 52 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

67. The cup assembly of claim 53 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

68 The cup assembly of claim 54 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

69. The cup assembly of claim 55 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

70. The cup assembly of claim 56 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

71. The cup assembly of claim 57 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

72. The cup assembly of claim 58 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

73. The cup assembly of claim 59 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

74. The cup assembly of claim 60 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

75. The cup assembly of claim 61 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

76. The cup assembly of claim 62 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

77. The cup assembly of claim 19 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

78. The cup assembly of claim 20 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

79. The cup assembly of claim 23 wherein the gap is filled with a gas selected from the group consisting of xenon, krypton, argon and nitrogen.

80. The cup assembly of claim 52 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

81. The cup assembly of claim 53 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

82. The cup assembly of claim 54 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

83. The cup assembly of claim 55 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

84. The cup assembly of claim 56 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

85. The cup assembly of claim 57 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

86. The cup assembly of claim 58 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

87. The cup assembly of claim 59 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

88. The cup assembly of claim 60 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

89. The cup assembly of claim 61 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

90. The cup assembly of claim 62 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

91. The cup assembly of claim 19 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

92. The cup assembly of claim 20 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

93. The cup assembly of claim 23 wherein the gap is filled with a material selected from the group consisting of a foam, blowing agent, cardboard and insulating liquid.

94. The cup assembly of claim 9 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

95. The cup assembly of claim 10 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

96. The cup assembly of claim 11 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

97. The cup assembly of claim 12 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

98. The cup assembly of claim 13 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

99. The cup assembly of claim 18 further comprising:

(d) an overmold ring located on an outer portion of the cup assembly in the area where the top end of the outer cup mates with the inner cup to seal the gap.

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